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Financial Sector Review and Strategy

Review of International Financial Architecture

TASK 1 REPORT

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I. International Financial Architecture – An Overview

In his address to the Summit Conference in Naples in 1994, President Clinton called for a review of the International Financial Architecture (IFA) to determine whether the institutions, policies and procedures created at the end of World War II were still suitable for today's globalized economy.[1] The concerns hinted at by Clinton in his address became an actuality before the year ended when a financial crisis erupted in Mexico, the resolution of which required innovative financing from the United States Treasury going well beyond established IFA procedures. Two years later there was an even larger financial crisis in Asia and in 1998 in Russia. In recent years Argentina, Brazil and Turkey have also experienced crises. The subsequent discussion on the International Financial Architecture has focused primarily on how to improve stability and reduce the number and severity of crises in the emerging market countries without an adverse impact on economic growth.[2]

Crises in emerging financial markets should be considered the rule not the exception. "In the past 20 years alone, more than 125 countries have experienced at least one serious bout of banking problems. In more than half of these episodes, a developing country's entire banking system essentially became insolvent. And *in more than a dozen cases, the cost of resolving the crisis was at least a tenth-and sometimes much more-of the crisis country's annual income."* (Council on Foreign Relations (CFR) 1999, 1, italics in orig.) In spite of periodic financial crises the last four decades have been a period of rapid growth in much of the developing world. Growth was to a large extent driven by increasing trade and capital flows. However, this has not been linear. Rather, growth has been punctuated by financial crisis and capital outflows sometimes affecting many developing countries.

Financial crises have many causes. If macroeconomic policy has been too expansionary, it can lead to deficits in the government budget and the balance of payments. Foreign borrowing, used to finance the deficits, often proves unsustainable. The exchange rate regime may also be the primary problem. Pegged exchange rates become overvalued, are defended too long, and eventually are subject to a sharp correction. Moreover, the currency of countries with fixed pegs and limited reserves are subject to speculative attack. Or the weakness may lie in the financial system. Today international capital flows are large and volatile. Countries, corporations, or banks can rely too heavily on short-term finance; the flow is easily reversed. Furthrmore, corporations can finance with too much debt. Firms with excess leverage are not robust and

[1] Clinton's remarks had been prompted by a lengthy report on the international financial architecture; see Bretton Woods Commission (1994).

[2] *In this paper, the rubrics emerging and developing markets are used interchangeably and definition is not made based upon income. Some writers use the term "emerging markets" to refer to only the subset of developing countries receiving large financial flows.*

small shocks (e.g., higher interest rates, currency devaluation, or a business downturn) can make them insolvent. Insider lending, such as state owned banks to state owned firms in socialist economies or crony capitalism (lending to related parties) in capitalist economies can result in a high level of nonperforming loans. It takes only a small disturbance to expose the weakness of banks and insurance companies with bad debts in excess of capital.

Weaknesses in the international system exacerbate the problems in the developing countries. Some argue that "moral hazard" created by International Monetary Fund (IMF) "bail-outs" is a major contributor to crisis. Curtailing the IMF's role of lender of last resort would reduce irresponsible private sector lending and go far to eliminate financial crises in developing countries. Others emphasize greater transparency and argue the problem would be ameliorated by better surveillance by the International Financial Institutions. Still others argue that the problem lies with the "herding" behavior of capital providers and the resulting contagion. They argue that changing the nature of financial contracts would stabilize capital flows and reduce the incidence of crisis. Through some form of legal mechanism private sector creditors should be forced to restructure outstanding debts ("bailed-in") in the case of crisis.

The present work on the International Financial Architecture aims at decreasing capital instability and the number and severity of financial crises without decreasing overall capital flows and growth. Following a brief history of the International Financial Architecture in the post-war period, recent actions and proposals for improving the Architecture are discussed in Sections 2, 3, and 4; in Section 2 proposals for the developing countries to implement, in Section 3 actions to be taken by the International Financial Institutions with emphasis on the lender of last resort function of the International Monetary Fund, and in Section 4 suggestions for changes in the developed countries that provide the funding. Section 5 presents a summary.

II. A Brief History of the International Financial Architecture in the Post-War Period

In 1944 at Bretton Woods the major powers met to design a set of institutions and policies that would govern international trade and financial flows. The conception was of a set of sovereign nations following independent economic policies but linked through trade. Financial flows among countries, which declined sharply following World War I, were not expected to return to pre-World War I levels. In fact, those who designed the Bretton Woods system "were eager to embrace controls on capital flows. They saw the free flow of capital as bringing little more than trouble: destabilizing speculation, irrational capital flight, and the potential for chains of contagious panic like those that had brought on the Great Depression." (De Long 1998, 1) The system of pegged but adjustable exchange rates decided upon at the conference was designed to enhance trade, not financial flows. The exchange rate system was effectively a modified gold standard, with the dollar defined in terms of gold and with other exchange rates in practice being defined in terms of dollars. Two important issues were not resolved by the system, namely, the creation of reserves as trade expanded and the management of a major exchange rate disequilibrium.

With a certain number of hiccups (particularly, the handling of the overvalued pound sterling), the system worked quite well for the first twenty five years. In the initial stages to recover from the devastation of the war, the world needed the goods provided by the U.S.: hence the U.S. ran a balance of trade surplus using the funds generated to become the leading creditor nation. But from the end of the 1950s onward, the situation was reversed. The level of European reserves was restored and there was no longer repressed demand for American goods. To fight the war in Vietnam, the U.S. ran a twin deficit in the fiscal account and in the balance of payments. The surpluses of the 1950s became the deficits of the 1960s. Instead of being a creditor, the United States became the largest debtor nation. As the U.S. dollar remained the world's reserve currency, the trade deficits provided the reserves needed by countries for liquidity in a world of expanding trade. But, dollar liabilities held abroad grew relative to the U.S. stock of gold. Some countries, particularly France, did not wish to hold the growing stock of dollars. Instead, they asked for settlement in gold or another reserve vehicle. This led to the creation of the IMF's Special Drawing Rights (SDR)[3] in 1969. However, the dollar remained the dominant currency in terms of the median of exchange, the unit of account, and to a large, though declining, extent the store of value.

Between 1970 and 1975 there were major changes in the International Financial Architecture. By 1970 it had become apparent that the dollar was overvalued and that adjustments in the exchange rates of the major currencies

[3] *The SDR is an artificial "basket" currency used by the IMF (International Monetary Fund) for internal accounting purposes.*

were needed. In 1971 the United States announced what was supposed to be a temporary suspension in gold payments; at the same time the European currencies appreciated relative to the dollar. In 1972 the industrial countries of mainland Europe created the "snake," a system for maintaining exchange rates within a band of 2.25 percent on either side of par.[4] Though there was continuing and heated discussion of returning to fixed rates, the market price of gold continued to appreciate, more than doubling in dollar terms. After the oil shock in 1973 the trade deficits of the United States became even larger. Though countries were free to reestablish pegged exchange rates of various forms, by 1975 floating, rather than fixed rates, had been accepted, not simply as a short term expedient, but in principle.[5]

The two major issues unresolved at the time of Bretton Woods, namely, the creation of reserves and changes in par values, now had solutions. SDRs would be created as needed to enhance liquidity and the industrial countries' exchange rates would be allowed to float. Becoming the issuer of SDRs enhanced the importance of the IMF, but floating rates diminished it. The major role of the IMF had been to monitor and enforce the rules of a system of par value exchange rates and to provide liquidity to countries needing temporary support to defend those par values. Neither the rules nor the loans were needed in a system of floating rates. But, the dynamics of the next five years were to create a new role for the IMF.

The late 1970s were characterized by the recycling of the surplus dollars of the oil exporting nations. For the first time in the post Second World War period, large sums of private capital flowed to developing countries, particularly those in Latin America. The mechanism worked as follows: the oil surplus countries deposited their funds in major banks, which in turn made syndicated loans to those countries running deficits. Most of the funding went to governments with the implicit assumption that sovereign borrowers would always repay their debts. The spike in most commodity prices at the end of the 1970s further reassured lenders that developing countries, most of whom were commodity exporters, could afford to repay.

The debt was heavily concentrated. Eight developing countries had received roughly 70 percent of the funds and the interest costs of their external debt rose from 5 percent of exports in 1973 to 15 percent in 1980 (Solomon, 329). The facile assumption about repayment proved incorrect. In 1982 Mexico announced that it could not repay its foreign debt. Within the next twelve

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[4] *Given the way the snake operated, the range of the band was nearer 3.5%, rather than 4.5%.*

[5] *At the end of 1981 8 industrial countries had floating rates, 8 European countries were in the snake and floated as a block. Of the developing countries, 38 pegged to the dollar, 14 to the French franc, 14 to the SDR, 22 to other currencies, and 36 floated.*

months other Latin American countries had also defaulted. Over the decade of the 1980s private lenders, primarily large banks, had to take substantial provisions to cover their losses on loans to emerging countries.

This was the second major post-war shock to the International Financial Architecture. It resulted in major changes in the practices of both the IMF and the World Bank. Instead of providing funds to illiquid countries to defend their exchange rate levels as envisaged in the Bretton Woods system, the IMF began providing loans, often following a major devaluation, to help countries to restructure their economies. The IMF became a crisis manager, acting as a lender of last resort to prevent creditor panics. Policy conditionality became central, as the IMF attempted to bring about necessary policy changes to restore a country's credit worthiness. For its part, the World Bank introduced for the first time program lending (financing for policy reform) to supplement its traditional project finance. These program loans, like Fund financing, were to help countries stabilize their economies in a post crisis period.[6]

Table 1 presents the flows of different types of capital to the emerging countries as a group for 1970, 1980, and for the years between 1987 and 2000. Williamson (forthcoming) provides a more complete time series for all years between 1970 and 1999. His figures show a rapid build up of capital flows following the first oil shock in 1973, primarily in the form of commercial bank lending. Total net flows (inflows minus repayments) rose from $15 billion in 1972 to $110 billion in 1981. Following the Latin American debt crisis in 1982, the total net flow declined to $44 billion in 1983. The recovery was slow and it took a decade for the total to return to the 1981 level of $110 billion. However, five years later in 1996 the total was over $300 billion. Were one to take a different measure, namely net resource transfers (see notes, Table 1), which nets out both the outflow of capital and interest payments on debt, volatility would be even greater.

In the 1990s the flow of capital was more diversified in form than in the 1970s. In the earlier period the flow had been primarily loans from bank consortia. In the 1990s there were four types of flows: foreign direct investment; foreign portfolio investment in equities; bank loans; and bond issues. Direct investment predominated. The suppliers of these funds were also more diverse; investments were made by private companies and mutual and pension funds in addition to banks. The money still flowed to rather few countries, though the distribution was somewhat larger than in the 1970s. In the 1990s the largest recipients of funds were the emerging markets of East Asia.

[6] *Over time the World Bank's program loans took on a broader function than simply post-crisis reform.*

Table 1: Net Capital Flows (1) (U.S. $billion)

All Developing Countries	OFFICIAL FLOWS: Official Lending (Including grants)	NET PRIVATE CAPITAL FLOWS: FDI	Portfolio Equity	Bonds		Bank Lending		Other Private Sector Lenders	Private Capital Subtotal	TOTAL: a+i	AGGREGATE NET RESOURCE FLOWS: Public Sector	Private Sector	Public Sector	Private Sector
	a	b	c	d	e	f	g	h	i	j	a+d+f+h	b+c+e+g		
Year	Public Sector(2)	Private	Private	Public	Private	Public	Private	Public			U.S. $ billion		%	
1970	5.4	2.3	0.0	0.0	0.0	0.6	1.7	-0.1	4.5	9.9	5.9	4.0	60%	40%
1980	35.2	5.3	0.0	0.0	0.0	24.2	9.7	12.6	51.8	87.0	72.0	15.0	83%	17%
1987	43.4	14.6	0.6	1.0	0.0	5.4	-2.4	5.4	24.6	68.0	55.2	12.7	81%	19%
1988	42.4	21.2	1.0	2.9	0.0	10.5	-3.2	3.3	35.6	78.1	59.1	19.0	76%	24%
1989	42.6	25.7	3.4	5.2	0.1	0.4	0.5	7.4	42.7	85.2	55.5	29.7	65%	35%
1990	57.9	26.7	3.7	2.7	0.7	-8.6	8.7	11.8	45.8	103.8	63.9	39.9	62%	38%
1991	61.8	36.8	7.3	9.4	3.1	-1.7	5.6	3.6	64.2	126.0	73.2	52.8	58%	42%
1992	50.3	47.1	14.0	4.7	8.3	0.1	12.7	16.2	103.1	153.4	71.3	82.1	46%	54%
1993	53.9	66.6	46.9	23.0	19.1	-6.4	-1.8	5.6	152.9	206.8	76.0	130.8	37%	63%
1994	46.2	90.0	35.2	17.0	11.2	-1.5	10.2	4.0	166.0	212.3	65.7	146.6	31%	69%
1995	54.0	107.0	36.1	17.0	13.8	6.2	23.6	1.7	205.3	259.3	78.9	180.5	30%	70%
1996	31.5	131.5	49.2	36.9	25.6	2.2	31.5	2.4	279.3	310.8	73.1	237.7	24%	76%
1997	40.5	172.5	30.2	25.8	23.2	6.7	38.5	2.7	299.7	340.3	75.8	264.5	22%	78%
1998	53.8	176.8	15.6	32.1	7.7	10.5	39.6	-3.0	279.2	333.0	93.4	239.6	28%	72%
1999	45.7	185.4	34.5	23.7	1.7	-21.5	-3.1	-0.3	220.4	266.1	47.6	218.5	18%	82%
2000	37.6	177.9	47.9	24.7	5.6	-0.6	1.3	0.3	257.1	294.7	61.9	232.7	21%	79%

Notes:

(1) Excludes IMF and Short-term Debt

(2) The sector refers to the borrowers or recipients to which the capital flows. Public sector data includes both public debt and publicly guaranteed debts such as official resources to public sector from multilateral and bilateral creditors, and bonds issued and or guaranteed by government. Private sector refers to private borrowers or recipients of the capital flows without any public guarantees to creditors. Usually, it is borrowing from commercial banks and other private creditors other than banks or via bonds such as supplier and export credits.

(3) Descriptions of Data
Developing countries in this paper includes emerging markets with significant private capital inflows such as Korea and Thailand. This data includes 137 countries that report public and publicly guaranteed debt under the Debtor Reporting System

(DRS). Please refer to the Country Groups of World Development Finance 2000 for the complete country list.

Column (a) shows official lending excluding IMF loans but including official grants which consist mainly of official aid from multilateral and bilateral donors. This is total net official capital inflows. The grants excludes technical cooperation. It naturally goes to the public sector. These built up fairly steadily until end of the 1980s but have stagnated or declined more currently.

Column (b) is foreign direct investment (FDI) which started to explode in the late 1980s and early 90s. Presumably, most of this went to the private sector. This increase is associated with the fact that developing countries achieved significant improvements in the regulations governing FDI during 1990s. Licensing requirements were removed, sectors previously closed to foreign investment were opened, restrictions limiting the share of ownership by foreign investors were eased, rules governing trade and foreign exchange transactions involving foreigners were liberalized, and regulatory framework for domestic financial markets was improved, just to name a few contributing factors for the increase. But the pattern of these flows is heavily skewed towards the larger and more industrialized of the developing countries.

Column (c) shows portfolio equity flows which also started to grow strongly in the early 1990s and then declined during the Asian crisis. Presumably again, most of this went to the private sector. Several factors contributed to the growth. It has become easier for industrial country investors to participate in developing countries' equity placements. More emerging market companies are able to issue American Depository Receipts. More rapid communications have reduced transaction costs and increased market liquidity. And efforts to meet higher standards of corporate governance may provide for easier monitoring of managers in the invested companies. Portfolio equity flows are also highly concentrated in a few countries.

Columns (d) and (e) are bonds issued by the public and private sector. No lending to the private sector was recorded at all until 1989. The recent financial crises reduced bond placements to private sector significantly while bond issuing by governments in developing countries remains relatively strong.

Columns (f) and (g) show bank loans with a maturity of more than one year, broken down between those made to public sector versus private sector borrowers. Loans to private sector borrowers seem to be most crisis-prone with a sharp collapse after the Asian crisis. As developing countries gain access to global capital markets easily, the share of commercial bank lending declines.

C**olumn (h)** shows lending to public sector borrowers by private sector lenders other than banks or via bonds. This consists largely of supplier credits and export credits provided by banks with a guarantee from an export credit agency.

Total net private capital flows are shown in **column (i)**. This is sum of "b" to "h".

Column (j) shows total aggregate net resource flows. This is the sum of official lending and net private capital flows on long-term debt excluding IMF. It is not net resource transfers which account for any short-term debts, interest payments, and capital outflows from developing countries such as capital outflows in portfolio investment and FDI (profit remittances).

Again, it was a crisis in Mexico that shocked the system. The Mexican government had issued a large quantity of short-term bonds denominated in dollars. When private creditors refused to roll over these credits in 1994-95, the IMF provided a huge loan equal to seven times Mexico's quota. The U.S. Treasury and World Bank provided substantial additional financing. The crisis in Mexico was followed in the next several years by deep crises in a number of Asian countries, in Russia, and more recently in Argentina, Brazil, and Turkey. These crises shared certain common features--widespread failure of domestic banks, a collapse of the currency, and inability to repay foreign debts. In a nutshell the crises of the early 1980s had been brought about by excessive borrowing by governments to finance their deficits and to defend overvalued exchange rates. The crises in the 1990s had some of the same elements but also showed that crisis could result from excessive debt in the private sector and unsound practices by domestic banks. As a result of these crises, there has been renewed focus on reform of the International Financial Architecture. The reform of the Bretton Woods approach in the early 1970s transformed the system from fixed to floating exchange rates for the major industrial countries and created a reserve currency (SDRs) other than gold and dollars. The reform of the 1980s converted the IMF into an institution designed to assist developing countries recover from crises. In the late 1990s the focus was on reforms that would lessen the frequency and severity of crises in emerging countries. Envisaged today are changes in the practices of the developing countries, the international agencies, and creditors in developed countries.

It is now recognized that preventing future crises and lessening their severity requires more than simply maintaining sound fiscal policies. The operations of domestic banking systems have become one of several concerns, and this has spilled over into examinations of corporate finance, accounting systems, financial law, bank supervision, etc. In each of these areas codes of best practice have been drafted and an attempt is being made to monitor the degree to which countries are following best practice.

In the 1970s concern was expressed whether a country's exchange rate was pegged at an appropriate level. Today, a second concern that has arisen is whether a country's exchange rate regime is appropriate. Economists argue that countries cannot successfully manage a pegged exchange rate and an open capital market if at the same time they employ monetary policy to further internal objectives. The issue, then, is the relationship among the openness of the capital market, the fixity of the exchange rate, and the objective of monetary policy. While there is a consensus that no one regime is satisfactory for all countries, the concern is whether individual countries are following a policy mix likely to contribute to crisis.

A third concern is transparency. Part of the problem turned out to be decision making based on poor information. For example, data on the private sector's external debts were incomplete. Governments have been providing misleading or even wrong information on the level of their foreign exchange reserves. Domestic accounting systems, used both by banks and corporations, differ substantially from international accounting standards. Hence, improving the quality of information has become a priority.

The most controversial aspect of the debate about the new International Financial Architecture has been the discussion of the appropriate role for the International Monetary Fund.

The most controversial aspect of the debate about the new International Financial Architecture has been the discussion of the appropriate role for the International Monetary Fund, with opinions ranging from abolishing the IMF to increasing its resources so that it can better play the role of lender of last resort in case of crisis. Those who would curtail the IMF's activity argue that the prospects of bail-outs using IMF funds has created moral hazard in the private sector, that is, a lack of concern about risk on the part of lenders to emerging markets and, indeed, of the governments of debtor states, as well. Those who support the IMF argue that while moral hazard may exist, the extent of the problem has been exaggerated, while the importance of contagion, that is, the danger that without a lender of last resort problems in one country can spread to others, is given insufficient attention by those who would curtail the activities of the IMF.

The fifth concern is regarding the private sector. In the 1980s the major creditors were commercial banks, who contributed to the restructuring by writing down debt or contributing new money (the Brady Plan). In the 1990s the major foreign creditors are often not banks but mutual and pension funds, which have often bought bonds rather than making loans. Bonds have proved harder to renegotiate. It is argued that the structure of contracts has enabled some foreign private lenders to avoid bearing a commensurate share of the burden in the workout procedures following crisis. The issue is how to "bail in" the private sector in the restructuring process. For example efforts are being made to introduce new terms into contracts, which would require the private sector to participate in debt restructuring.

These issues will be examined in the following three sections dealing in turn with the practices of the developing countries, the International Financial Institutions (IFIs) and other donors, and the creditors in developed countries and their supervisors.

III. Actions by Developing Countries

The actions to be taken by the developing countries to enhance stability include-providing the markets with more comprehensive, accurate, and timely data; improving the operations of the domestic financial markets; taking steps to stabilize the flow of foreign capital; and avoiding pegged but adjustable exchange rates. Each of these is discussed in turn.[7]

III-A. Greater Transparency

Improving the quality of information about the emerging markets has been seen as one of the keystones of the International Financial Architecture. (See the Report of the Working Group on Transparency and Accountability, 1998.) While this effort predated the Asian crisis, that crisis made apparent the data problem. In Thailand information provided by the central bank on the level of foreign exchange reserves proved incorrect as the Thai government had sold much of its foreign exchange holdings in the forward market.[8] In Korea no one was certain about the extent of short term borrowings by commercial banks, and Daewoo, the second largest corporation that later was forced to declare bankruptcy, had concealed a substantial portion of its corporate debt in foreign subsidiaries for which it did not report consolidated accounts. Imprecise and imperfect data have played a role in most of the recent financial crises. Borrowers have been devious and lenders have been careless.

At present efforts are being made to upgrade the reporting of macroeconomic data, of data on financial system aggregates, and on international financial obligations. The IMF has taken the lead in this effort to improve the quality of the data. It established in 1996 the Special Data Dissemination Standard (SDDS)[9]. Participating countries provide more, better quality, and more timely data. By mid-2000 47 countries were participating in the SDDS including 23 developing countries. To help countries improve the overall quality of their data the IMF developed the General Data Dissemination System (GDDS). Both systems are under continual improvement.

One more area that is crucial to greater transparency is business accounting. International Accounting Standards (IAS) do exist, but their use is far from universal. Most countries have their own accounting standards, which local companies are required to use, and these can differ in important ways from IAS. In the financial field the most important differences are with regard to

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[7] *Development is a complex business with many facets. Some would consider the issue of improving corporate governance as part of the International Financial Architecture; others treat it as a developmental issue. In order to set some boundary to a task that ran the danger of getting out of hand, the issue of corporate governance is not treated in this paper.*

[8] *Russia and Ukraine misinformed the IMF on their level of foreign exchange holdings.*

[9] *The second paper prepared for this project, on the role of domestic and international players in financial sector development, elaborates upon the definition of the SDDS and GDDS.*

loan and asset evaluation, provisioning, and the accrual of unpaid interest. More lenient loan classification reduces required provisions, hence exaggerating the level of an intermediary's capital, and more lenient treatment of accrued but unpaid interest exaggerates income and earnings. As a result of using less stringent standards than required by IAS, supervisors do not intervene and banks that would be insolvent under IAS standards, are allowed to continue to operate. Considerable effort is being made by the IFIs to encourage countries to introduce IAS, but progress is slow in this area. The problem of overestimating the quality of debt goes deeper than the accounting system in use. Many financial intermediaries will roll over matured but unpaid debt, a process referred to as ever-greening of loans. Better auditing and supervision should reveal such actions.

The effort to introduce greater transparency goes beyond improved data collection. Reference was made above to accounting systems. The international bodies have recognized that the analytic systems in use must be of quality and themselves transparent. During the last half decade there has been considerable work on developing standards and codes of best practice. At present standards have been developed for many areas of the economy, of which twelve are monitored by the IFIs in the following fields: banking, insurance and securities market regulation and supervision; transparency of monetary and fiscal policy and data dissemination; and principles and guidelines for insolvency, corporate governance, accounting, auditing, payments systems, and money laundering.

The IMF and the World Bank have developed a program for analyzing the degree to which country procedures conform to best practice as defined by these standards and codes. Country reviews of standards and codes (ROSC) are frequently done as a part of the Financial Sector Assessment Program (FSAP).[10] The ROSCs are one component of the FSAP process; another is an assessment of the domestic financial systems' vulnerability to shocks, as might be caused by a devaluation of the domestic currency or a sharp rise in interest rates. A third component is to identify the main developmental requirements of a country's financial system and the needed follow up measures. To enhance transparency countries are encouraged to publish the results of the ROSC process as well as the summary reports of the FSAP submitted to the board of the IMF. In the two fiscal years 2000 and 2001, the Bank/IMF conducted about 35 FSAPs and partial or complete ROSCs for a number of other countries.

[10] *FSAPs are undertaken for both developed and developing countries. Implementation of this program is reviewed in Paper 2*

Other areas of transparency are worth mentioning. The IMF conducts annual reviews of countries' economies, known as Article 4 consultations. Eighty per cent of the countries now publish the Public Information Notices which present the IMF's Executive Board's discussion of the Article 4 consultations, and one-third of which are subsequently published. Furthermore, when there is an IMF stand-by agreement about 90 percent of the countries publish information on the terms and conditions of the IMF agreement.

All of the initiatives mentioned above will help improve transparency. However, most of the actions discussed are voluntary and today there is only partial compliance. A relatively small number of developing countries are providing data which meet the SDDS and only a few of the riskiest countries have thus far had FSAPs. Furthermore, there has been little attention given to the cost of compliance with these programs, either from the standpoint of the IFIs or the developing countries. FSAPs are expensive and their implementation has forced the IFIs to abandon most other types of analytic work on countries' financial systems. From the standpoint of the countries the costs can be even more burdensome. Most of the developing countries have very small financial systems. In 50 countries total banking sector assets are less than $1 billion and in 100 they are less than $10 billion. Cost of compliance relative to assets is a factor that has not been given adequate consideration. Speaking of the new standards and codes, Williamson (forthcoming, 4) concluded: "These reforms are unquestionably desirable in themselves, although it is right to recognize that problems of cost and capacity may constrain the speed of implementation."

These reforms are unquestionably desirable in themselves, although it is right to recognize that problems of cost and capacity may constrain the speed of implementation.

III-B. Improving Domestic Financial Systems

An external financial crisis is usually accompanied by a domestic crisis. Debtors who have borrowed abroad also owe money to domestic financial institutions. Crisis erupts when borrowers are unable to service either their internal or external debt. Sometimes the markets are segregated, perhaps by capital controls. Then the crisis may be only in the domestic market. For example, many of the transitional economies continued to service their international debts, while the domestic intermediaries were failing because of unpaid loans from state owned enterprises. Still, under market conditions and open capital accounts, domestic and international crises are likely to go hand in hand. In fact, much of the foreign borrowing is done by domestic financial institutions. Hence, when their own loans to enterprises go unpaid, they cannot service their external obligations. If domestic institutions do a good job of screening borrowers for risk, external crises are far less likely. Hence, in attempting to build a stronger, less crisis prone international financial system, much emphasis has been placed on improving the financial systems in the emerging countries themselves.

Improving the financial systems in the developing countries has many facets and this is not the place to discuss them in detail. (See, for example, Report of the Working Group on Strengthening Financial Systems, 1998, and Caprio and Honohan, 2001). An example will illustrate the depth of the problem. Two types of insider loans have been quite common in developing countries. In socialist economies loans from state banks to state enterprises are widespread. In capitalist economies bank loans to cronies, often made at the behest of politicians, are common. Many of these loans have not been repaid. As a result many banks and other financial institutions have deeply negative capital. Probably this is the most serious and widespread problem in the financial systems of developing countries.

To resolve the problem, the flow of new loans to the same borrowers must be stopped. While that measure seems straightforward, it usually has deep economic, political, and even social ramifications. Many people are employed by these unprofitable corporations, which without funding would have to close. But, if the flow of bad loans is not stopped, the problem of negative bank capital simply becomes bigger and more difficult to resolve. Resolving this issue requires better corporate governance in both the enterprises and the banks.

The size of hole in the banks' capital is not known precisely because the accounting systems are often poor in terms of structure, skill levels, and application. So, the accounting system and profession must be improved. Only because supervision was lax were the intermediaries able to get into such a mess in the first place. So supervision must be upgraded. Often creditors are unable to collect on nonperforming loans because of the laws and the way the laws are administered. Hence the legal system as well must be upgraded and judges trained in bankruptcy proceedings. Tax laws must be changed to allow financial intermediaries to make adequate provisions for bad loans.

Banks with inadequate capital are in a precarious position, always facing the possibility of a run. Many developing countries do not have adequate systems of deposit insurance to discourage runs. In many developed countries the deposit insurance agency is responsible for resolving and managing insolvent banks. That function also is missing or weak in developing countries. Resolution can drag on because markets for selling impaired debts do not exist or because governments refuse to sell impaired assets at prices the market considers realistic. Banks that have been effectively nationalized when the government provided funds to cover losses remain in government hands rather than being resold to the private sector. Improving the financial systems in developing countries requires work on many fronts.

The World Bank's efforts to improve countries' financial systems predates the Asian Crisis, going back to the mid-1980s. Between FY 1984 and FY 1999 the World Bank made 77 Financial Sector Adjustment Loans, 26 Technical

Assistance Loans in Finance, and 435 Investment Loans through the financial sector. Loans in the first category were designed to improve policies in the financial sector and loans in the latter two to improve operations. Many of the World Bank's loans for macroeconomic policy reform also contained conditions referring to the financial sector. By its own assessment, these efforts have not been particularly successful. However, it is not the design or the content of the loans that have been the primary problem, but the lack of will in the borrowing nation to implement the necessary changes.

Given the efforts at improvement over a considerable period, why do so many financial systems in developing economies remain weak? The liberal model of finance implicit in the International Financial Architecture does not accord with the prevailing paradigm in all countries. Many governments wish to use finance as an active tool of government led development. In many cases the government owns the major financial institutions and uses the institutions' funds to further other policy objectives. The largest block of loans in many developing countries is from state owned banks to state owned companies, and today many of these loans are not being serviced. In countries with large rural populations, governments mandate agricultural credit programs and in some countries politicians curry favor by telling farmers they do not have to repay these debts. Even where the institutions are privately owned, the government may direct how funds are to be allocated, as for example in Korea before the crisis.

Furthermore, in developing countries, and perhaps everywhere as well, finance is close to politics, closer in fact than other economic sectors. In many countries politicians direct loans to be made to political supporters with repayment only weakly enforced. Monies are extracted from financial intermediaries to finance political campaigns; politicians may even demand personal favors. In return the politicians protect the interests of the financial intermediaries. The unholy alliance between politics and finance is often the single largest impediment to financial reform in developing countries.

Another impediment is the cost of reform. Mentioned in the introduction was the fact that resolution of financial crises in more than a dozen countries has required the government to inject capital into the financial system equivalent to more than 10 percent of GDP. The recent crises in the Asian countries has cost the governments even more. In Indonesia, for example, the estimate is that the cost of the crisis will approach 50 percent of GDP. China has not had a crisis, but the value of the bad loans in the banks' portfolios is thought to approach 50 percent of GDP. The most common form of crisis resolution consists of exchanging government bonds for the financial institutions' bad debts. That is, if there is recapitalization, the cost will be born by the taxpayers and many governments are simply unwilling to raise the needed taxes. Turkey, for example, had a huge hole in its public banks, which while recognized, was not dealt with for many years.

Financial sector insolvency is a widespread phenomenon in developing countries. But insolvency itself does not produce a crisis; financial crises are the result of illiquidity. Financial institutions can be very insolvent but still liquid. They usually become illiquid only after significant withdrawals, often by external creditors. Because depositors feel assured that governments will honor their obligations, publicly owned banks seldom experience runs even when they have been deeply insolvent for years. What this means is that governments do not have to take action simply because banks are insolvent. While the government's obligation to recapitalize banks may be implicit, as long as it is not explicit, it does not have to be funded.

Failure to make reforms in domestic financial systems is seldom simply a technical problem. Governments of developing countries do lack information and technical expertise for dealing with financial sector issues, but these are not the heart of the matter. Rather, short of crisis, the existing flawed system may be serving important interests better than they would be served by a more honest and robust financial system. In addition, reform in many countries will prove costly to the fisc, and governments do not wish to ask taxpayers for the funds. For these two reasons they would prefer to live with flawed systems, even though the international agencies tell them that their imperfect systems hamper growth and expose the country to potential crisis.

III-C. Foreign Participation in the Financial Sector

One recommendation to improve the financial system is to sell government owned banks to foreign financial intermediaries. Until recently such proposals were rejected, but today some governments are indeed selling their banks. In Central Europe the governments sold the banks as part of the transition to a market economy. In other countries the need to reduce the costs of restructuring banks following a major crisis and to build systems that would be more efficient, provide a wider array of products, and be more robust in the face of shocks has led to sales to foreign intermediaries. The need to bring management practices to world standards requires linkages with foreign sources of expertise.

On their part foreign banks have been interested in expanding abroad because they face intense competitive pressure in their mature home markets. In the past foreign intermediaries faced substantial barriers to entry in most emerging markets, finding it difficult to acquire a license and, if they did get a license, facing restrictions on the number of branches and controls on permissible activities. As these constraints have been relaxed in recent years, in addition to buying, foreign banks have opened green-field branches and subsidiaries. In Central Europe the share of total bank assets controlled by foreign banks rose from less than 10 percent in 1994 to more than 50 percent in 1999. In Latin America foreign control has grown from 10 to 25 percent over the same period. In East Asia the presence of foreign banks remains relatively low; only in Hong Kong and Malaysia does it exceed 10 percent. However, the situation there is likely to change. A large share of bank assets is still under government control in the aftermath of the crisis, and governments eventually will have to reprivatize domestic banks, certainly with some sold to foreigners. Similarly, as part of its entry to the World Trade Organization, China has agreed to open its domestic corporate banking market to foreign financial institutions in two years and its domestic retail banking market in five years. (Mathieson and Roldos, 2001)

Foreign participation in the financial sector can have an important impact on both efficiency and stability. Recent studies indicate that foreign-owned banks in emerging markets have been more efficient in terms of both costs and profits and have a smaller percentage of nonperforming loans than domestic banks. The competitive pressures created by foreign entry have led to improvements in system-wide efficiency in terms of lower operating costs and smaller margins between lending and deposit interest rates.

Foreign participation in the financial sector can have an important impact on both efficiency and stability.

There is some evidence cited in Mathieson and Roldos (2001) that foreign banks improve stability as well. One study examined the lending behavior of foreign and domestic banks in Argentina and Mexico in the period surrounding the 1994–95 Mexican crisis and concluded that foreign banks exhibited stronger loan growth compared to domestic banks, contributing to greater stability in financial system credit. Another study noted that U.S. money center banks generally sustained the operations of their offshore branches and subsidiaries during the recent emerging market crises. While overseas claims by foreign creditors on domestic entities in Asia decreased 36 percent between June 1997 and June 1999, local claims of foreign banks declined just 6 percent (in Korea, local claims actually rose 19 percent). A third study analyzed the relationship between foreign bank presence and systemic banking crises and concluded that greater foreign bank participation has been a stabilizing factor in part because in a crisis depositors, rather than take their money out of the country, shifted their funds to foreign institutions perceived to be sounder than local banks. For example, the market share of deposits in foreign banks tripled in Korea and Indonesia between January 1997 and July 1998.

The growing presence of foreign banks in emerging markets has increased the complexity of supervision. First, there is the issue of how to monitor the local establishments of international banks. When international banks enter an emerging market, they typically offer a variety of new financial products. Supervisors need to develop the expertise to monitor these new activities and instruments. Second, supervisors need to be aware of the financial positions of the parent banks, since difficulties at one of the parent organizations could quickly create doubts about the viability of its local branches. A third issue is understanding when and to what extent parent banks will support their local operations in times of difficulty. Thus far the experience with foreign owned banks has been favorable on the whole. Though, there have been problems such as the failures of BCCI and Peregrine. Major banks have supported their subsidiaries in developing countries in periods of trouble.

III-D. Capital Controls

Because of the problems experienced in the 1920s and 1930s, those who designed the Bretton Woods system at the end of World War II had not wanted to encourage capital movements. Prevailing notions today are more in line with the last half of the nineteenth century-namely, that capital sent from rich countries to poorer nations is beneficial, as it enables the developing countries to finance a higher level of investment and growth than it could through its own savings. "The classic benefit of international capital mobility is the ability to divorce the levels of investment within a country from the level of national savings." (Williamson, forthcoming, 14). When the capital flows are in the form of direct investment, the developing country also acquires technical information and skills in the form of a new method of production, or marketing and management skills. Moreover, to make themselves attractive to international investors, countries seeking foreign capital of all kinds are more likely to follow disciplined policies that contribute to growth.

Yet, the volatile nature of capital flows does appear to add to instability. "The free flow of financial capital is also giving us one major international financial crisis every two years. The root cause of the crises is the sudden shift in international investors' opinions. Like a herd of not-very smart cattle, they all were going one way in 1993 or 1996; then they turned around and are all going the opposite way today." (De Long, 1998, 2). Could there be too much of a good thing? Are some types of capital imports better than others? Do countries whose domestic financial markets are less developed need to be more cautious in dealing with external funding? Can the flow of capital over time be stabilized without adversely affecting the amount available?

In general the answer to all these questions appears to be yes. Some form of capital controls does seem desirable. The form of capital flows is important. Foreign direct investment is the least volatile form of capital flow; short term bank credits are the most volatile. To the extent possible developing countries should rely on the more stable forms of capital. Even economists who generally favor liberalized markets are concerned about short term borrowing abroad. Fischer while still Deputy Managing Director of the IMF stated: "That is not to say, however, that countries should open their capital accounts prematurely…and they may particularly want to avail themselves for some time of controls on short-term capital flows." (Fischer, 2000, 4) A requirement for a reserve on short term borrowings, which would not pay interest, as implemented in Chile, is often recommended. It is also important to prevent domestic banks from making unsound investments financed by foreign borrowing. "A currency crisis or unexpected devaluation can undermine the solvency of banks and bank customers who, under lax regulation, have built up large liabilities denominated in foreign exchange currency. It is not financial liberalization that is at the root of the problem but rather weak management in the financial sector and inadequate supervision and regulation, whose consequences are magnified by liberalization." (Eichengreen et al., 1999, 6 and 7)

The timing and sequencing of liberalization is also important and if premature can contribute to crisis. It is usually suggested that foreign direct investment poses little threat to stability and so is acceptable at any time, but portfolio investment is more problematic and should be delayed until the infrastructure of the capital markets has been strengthened. Long term loans are more stable than short term; hence, opening to short-term capital should come last and not before the problem of domestic bank insolvency have been resolved.

In today's world, capital controls are difficult to implement. Two generally accepted propositions are that it is easier to control the inflow than the outflow, and that controls on flows may work, albeit imperfectly, in the short run but the ability to implement them erodes with time. Williamson (forthcoming, 22) concludes: "One should attempt to break the boom-bust cycle, not by substantially curtailing the flow of capital, but by aiming to make the flow of capital less unstable. Perhaps the price of stabilizing the flow will be some reduction in the average size of the flow….In that event the aim should be to balance volume and stability."

III-E. Exchange Rate Systems

Under the Bretton Woods protocol, a key responsibility of the IMF was to see that within the system of pegged exchange rates, a country did not allow its exchange rate to become overvalued. But, the growing size and volatility of capital movements has made performance of this task more difficult. Hot money trying to profit from devaluations has increased instability. Today most economists argue that developing countries should adopt either a rigid peg or a floating rate, the two extreme positions, but that the intermediate regimes are unsustainable with reasonably open capital markets.[11] "In recent years, fixed or pegged exchange rates have been a factor in major emerging market financial crisis." (Fischer, 2001, 1)

In an analysis of exchange rate systems, Fischer (2001) has shown that, indeed, there is a movement toward the corner solutions; he calls this "a hollowing out" of the exchange policy spectrum. Classifying the regimes of 55 developing countries, he says that in 1999 14 had hard pegs versus 3 in 1991, 26 had floating rates versus 16, and the number with intermediate solutions has fallen to 15 from 36. But while the intermediate systems have proved problematic, so have the corner solutions. Argentina has had a currency board with the peso tied rigidly to the dollar. Because of its past history of inflation and indiscipline, Argentina needed a stringent regime, such as a currency board, to bring credibility to its stabilization program. However, the subsequent appreciation of the dollar coupled with domestic developments led to a domestic recession. Under one of the more flexible regimes, the government could have used monetary policy to stimulate the economy and, if needed, devalued the currency. Instead, Argentina suffered a crisis requiring massive assistance from the IMF to support the peso.[12] Thus far, relatively few countries have been willing to adopt a currency board. Of the 33 middle income countries, only 3 had very hard pegs or were using another countries' legal tender.

Floating rates of one kind or another are more popular, but few countries have moved toward pure floats, because without some intervention the exchange rate can move to extreme positions. In the wake of the recent crises, most of the countries involved did let their exchange rates float. The result was deep depreciation, by 552 percent in the case of Indonesia from 2,396 rupiah to U.S. dollar in January 1997 to 14,900 in June 1998. The overshooting involved was subsequently corrected, the rupiah recovering from 14,900 in June 1998 to 6,726 in June 1999. But, the extreme volatility was disruptive. Even with interventions in the exchange market by the authorities, the major floating currencies experience substantial swings. For example the dollar-to-yen ratio has moved from 158 Yen to U.S. Dollar in April 1990 to 84 Yen in April 1995, and then went back to 145 Yen in August 1998, showing more than 45 percent in changes over the last ten years. The volatility of minor currencies tends to be even greater. Large changes in the exchange rate can well have major effects on trade, on the cost of servicing external debt and on the economy. As a result even those countries that do float tend to intervene in the market when they consider the exchange rate movements to be too extreme. Fischer (2001) concludes that "most countries' policies will still take some account of exchange rate movements."

Though still a minority position among economists, some have begun to argue that either extreme solution will adversely affect output. "They are told that they should allow their exchange rates to float (or maybe adopt a hard fix, e.g. with a currency board), without the slightest recognition that even if this is effective in diminishing crisis, it may come at the undermining of the chance of

[11] Frankel (1999) provides a good discussion of the types of countries that would find one regime better than another. A hard peg would be either a monetary board (e.g., Hong Kong) which does nothing but exchange domestic currency for foreign exchange, or the use of a major currency for domestic transactions (e.g., Panama's use of the dollar).

[12] While it did not amount to a crisis, even Hong Kong had difficulties during the Asian crisis.

achieving high rates of growth in noncrisis conditions (Williamson forthcoming, 5). Intuitively most governments of developing countries have been reluctant to accept very hard pegs or freely floating rates. Hollowing out does seem likely to continue, but not to the extreme positions.

IV. The IMF as Lender of Last Resort

The International Financial Institutions and other donors play a variety of roles in the implementation of the International Financial Architecture including the following: design of the architecture; the development of standards and codes of best practice; the collection of data, the execution of various forms of surveillance such as Financial Sector Assessments, the provision of adjustment loans which through conditionality aim to improve a country's policy framework in the financial field, the funding of development projects in the area of finance, such as the finance of micro and small and medium scale enterprises; the provision of training and technical assistance to the institutions responsible for the regulation and supervision of the financial markets, and finally action taken as the lender of last resort in times of crises. A number of these items have been mentioned in passing in the prior sections. This section focuses on the last item, that is, the role of the IMF as lender of last resort. The others will be discussed in Paper 2, which deals in more detail with the activities of the IFI and other donors.

Efforts to improve domestic financial systems in emerging countries goes well beyond the effort of IMF and World Bank. The standards and codes of best practice have been drafted by the international financial institutions or the international associations of national supervisory bodies (see the second paper of this series). The International Financial Corporation and the Regional Development Banks have been active at many levels, including taking equity positions in a substantial number of institutions, providing both capital and participating in governance. The larger bilateral donors, particularly the U.S., U.K., Germany and Japan, provide technical assistance at the institutional level.

IV-A. Lender of Last Resort

Of all the issues associated with reform of the IFA, the most contentious is the role of the IMF as lender of last resort. In 1997 the IMF had established a new lending window called the Supplemental Reserve Facility. This enabled the IMF to extend its role of lender of last resort to crisis countries, making bigger loans for short time periods though at a higher interest rate. Recommendations ranged from eliminating the IMF on one hand[13] to expanding its capital on the other.[14] The debate reached its apex in 1999-2000 with the publication of two reports and the ensuing debate on those reports. One of the two reports was-prepared by the Council on Foreign Relations (1999) and the other by the International Financial Institutions Advisory Commission

[13] Several members of the IFIAC supported abolishing the IMF, though the final report did not take that position. See also Niskanen (1999).

[14] In 1998 a decision was taken to expand the IMF's capital by 45%.

(IFIAC) (2000).[15] The commentary is vast.[16] The debate has been more ideological than empirical, with some, but relatively little, factual evidence cited to support positions. Analysis of these two reports highlights the issues raised in the debate.

There were significant areas of agreement between the two reports (Bergsten, 2000): namely:

- Both noted the importance of strengthening financial systems in developing countries and urged the IFIs to give priority to improving countries' financial sectors;
- Both agreed on the need for greater transparency and accountability in developing countries and in the IFIs themselves;
- Both agreed that pegged, but adjustable, exchange regimes are unstable and lead to crisis;
- Both agreed that loan conditionality had become overextended and proposed a sharper delineation of responsibilities between the IMF and World Bank, with the Fund responsible for macro, exchange rate, and financial sector issues and the Bank responsible for micro, structural, and developmental issues. There is some evidence that under the influence of its new managing director (Kohler, 2000) the IMF is attempting to focus more on its traditional role, leaving longer term structural adjustment issues to the World Bank.

The most important disagreement concerned the role of the IMF in lending to developing countries experiencing a crisis.

The most important disagreement concerned the role of the IMF in lending to developing countries experiencing a crisis. The central issue can be stated quite succinctly: the IFIAC report took the position that IMF lending following a crisis entailed ex post "bailing out" of private lenders. The anticipation of a bail-out could lead ex ante to "moral hazard," that is, it could induce private lenders to underestimate the inherent risks in providing funds to developing countries and hence to make loans they otherwise would not make. Over-lending in periods of expansion were inevitably followed by a sharp reversal in flows in times of contraction. Exaggerated volatility led to crisis. Furthermore, claims of contagion are over-blown; crisis does not spread from weak to strong economies, only from one weak economy to another. Lending should be restricted to countries that had been pre-qualified; as a result detailed conditionality, which was "highly conflictive, time consuming to negotiate

[15] *The members of the IFIAC were appointed by the United States Congress. The debate had noticeable political overtones. Of the five members appointed by the Democrats, four dissented from the majority report, while all the six Republican appointees signed.*

[16] *The review draws heavily on Goldstein (2000). See also Dorn and other articles in Cato Journal Vol. 18, No. 3 (Winter 1999), Eichengreen (1999), Fischer (2000), Articles in U.S. Information Agency (USIA), Vol. 3, No.4 (August 1998).*

and often ineffectual" would be unnecessary. "The IMF has given too little attention to improving the financial structures in developing countries and too much to expensive rescue operations…. [The IMF's] system of short-term crisis management is too costly, its response too slow, its advice often incorrect, and its efforts to influence policy and practice too intrusive." (IFIAC, 2000, 3).

The Commission members who dissented argued that the majority report gave too unfavorable an evaluation of IMF conditionality that the historical results on the whole have been favorable: "…the bottom line of the "era of the IFIs," despite obvious shortcomings, has been an unambiguous success of historic proportions in both economic and social terms." (IFIAC, 119) "… we have looked in the 1930s at how serious global instability is handled without an IMF, and few would want to return to that world." (IFIAC, 88) and "… the allegations of the report simply fail to square with history." (IFIAC, 121).

The conservative position posits a world in which there would be no promise ex ante of an IMF bailout; this they argue would reduce lending in the first place. Because the possibility of ex post financing existed, the conservatives maintain there has been excess funding ex ante. At the moment of crisis, IMF lending may indeed be beneficial.

The CFR report argued that the notion of "bailing-out" is exaggerated, that in the crises in emerging markets private financiers have suffered substantial losses. There is little evidence of moral hazard in lending to the Asian countries, though perhaps some in the case of Russia. (Fischer 2000, 8) Without IMF support there would be deeper panics which through "contagion" would spread to other countries. IMF conditionality, which would not exist in the absence of loans, was important to bring about the reforms needed to stabilize the situation. Fiscal and financial systems would be weaker and the boom-bust cycle worse without IMF intervention. The CFR report emphasized that: "As costly as the Asian crisis has been, no doubt we would have seen even deeper recessions, more competitive devaluations, more defaults and more resort to trade restrictions if no financial support had been provided by the IMF to the crisis countries." (CFR, 1999)

The argument between the two sides is not perfectly joined in the two reports. The conservative position posits a world in which there would be no promise ex ante of an IMF bailout; this they argue would reduce lending in the first place. Because the possibility of ex post financing existed, the conservatives maintain there has been excess funding ex ante. At the moment of crisis, IMF lending may indeed be beneficial. The position of the conservatives is that only if that is eliminated or curtailed will crises be reduced in number and severity. Summers characterizes the debate as follows: "In a sense, moral hazard is the mirror image of contagion. When the availability of a supply of capital raises confidence and investment, it can either be called confidence that reduces contagion, or it can be called moral hazard." (Summers, 1999, 327)

To understand the practical as distinct from the ideological side of the debate, as in judging diving or skating competitions, it is best to eliminate the extreme positions. The voices in-between focused on measures to reform the IMF's lending practices. The details of the debate can be divided into the following subjects: eligibility for crisis financing, and the terms of loans following a crisis.

IV-B. Eligibility

The majority report of the IFIAC suggested that, except in cases where the global economy was endangered, IMF lending should be limited to liquidity (short-term) support to solvent countries that had met preconditions for financial soundness. The most important preconditions listed were: a strong, fully capitalized financial system in which foreign financial institutions were allowed to engage in domestic activity, provision of regular information on the country's external debt including off-balance sheet liabilities, a responsible budget, and avoidance of a pegged but adjustable exchange rate regime. Commentators have argued that the IFIAC proposal on eligibility is far too restrictive. Too many developing countries would be excluded either because they could not meet the preconditions or because their external debts were too small to threaten global stability.

The second criticism is that the conditions for prequalification would neither prevent crises nor restore balance of payment equilibrium. In many cases other types of changes in policy would be required; hence ex post conditionality could not be eliminated. For example, IFIAC minority argued that the prequalification conditions did not adequately cover macro/monetary stability. If precrisis conditions were maintained after the crisis, "…this would virtually eliminate any prospects of overcoming the crisis." (IFIAC, 121) The U.S. Treasury (2000, 17) reached a similar conclusion: "…the proposed eligibility criteria are too narrow. Even where they are met, they would be unlikely to protect economies from the broad range of potential causes of crisis."

The third line of criticism was that the Fund could not ignore the plight of countries that did not prequalify. Stanley Fischer, then Deputy Managing Director of the IMF, argued: "It is doubtful that the international community would be indifferent to the fate of countries that do not meet the prequalification requirements, or to the instability that might be generated when they get into trouble and are denied help. In practice, in such circumstances the large industrial countries would probably find another, less transparent, way to help the country in crisis." (Fischer, 1999, 10) The CFR report suggested that countries following good policies should be rewarded with loans at lower interest rates, but would still allow the Fund to lend to less prudent countries. The U.S. Treasury noted (2000) that the majority's recommendation would preclude the IMF from being able to respond to almost all emergencies in developing countries and that probably none of the countries experiencing crisis in 1997 and 1998 would have qualified for the Fund's assistance had the rule then been in place. Goldstein (2000, 15) in his review article concludes that "While those conditions would, ceteris paribus, reduce the risk of getting into crisis, they are not sufficient to deter crisis; just as important, they are not very useful for getting out of crisis once it hits."

The IMF has responded to the suggestions made in a number of ways. In April 1999, it introduced a Contingency Credit Line. Countries could pre-qualify for this facility by maintaining sound macro policies, comply with the codes and standards of best practice and maintain a constructive relationship with their private creditors. Under the initial procedures, drawings under the facility were not fully automatic and had to be approved by the IMF's Executive Board. Furthermore, it required a commitment fee and an interest charge equivalent to the Supplemental Reserve Facility (SRF)[17] making it no more favorable than post-crisis borrowing. Though the IMF eased the terms in the Fall of 2000, reducing the interest charge and commitment fee and making the activation review less demanding, no country has yet tried to qualify.

IV-C. Interest Rates

In his famous statement on the appropriate approach for a central bank to take in acting as a lender of last resort, Bagehot (1873) recommended liberal lending to illiquid but solvent institutions against good collateral, but at a penalty interest rate. The penalty rate was to give potential borrowers an incentive to turn first to sources of funding other than the central bank, reserving for the central bank the true role of lender of last resort. Presently the IMF charges borrowers a weighted average of short-term interest rates in the G-5 countries plus a small surcharge. In recent years that has meant a rate in the 4 percent range, hardly a penalty rate. In fact, the rate is less than half what developing countries would pay for private funding. Instead of discouraging, such a low rate encourages countries to turn to the Fund. To limit borrowing the Fund uses moral suasion, tough conditionality, and quota (quantity) limits. On the SRF, the Fund does charge a premium rate.

The IFIAC report recommended much higher rates on IMF loans, namely that they be set at a premium over the sovereign rate prevailing in the week prior to applying for an IMF loan. While accepting that the IMF should probably adopt a penalty rate system, others have suggested that the penalty rate should be based on sovereign rates prevailing in normal rather than crises times. (Goldstein 2000, 3) Too high interest rates could perpetuate the state of crisis. In practice the IMF has accepted the idea of a penalty rate on its newly

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[17] *Details on IMF lending is found in the second paper in this series, by Gillian G.H. Garcia, on domestic and international players.*

created Supplemental Reserve Facility of 300-500 basis points above its normal lending rate, with the higher rate applying to longer maturities. In fact the proposal that the IMF charge higher rates has found quite widespread support; Summers (2000, 5) stated that "…a strong case can be made for an overall increase in the basic rate of charge."

IV-D. Maturities

Traditionally, IMF stand-by loans required repayment in 3.25 to 5 years from the time of withdrawal; the Extended Fund Facility, which is meant for countries with structural problems, had a maturity of 4.5 to 10 years. The IFIAC report suggested that IMF loans should be limited to a maturity of only 120 days with one allowable rollover. Their rationale was that such loans were to deal with liquidity, not solvency problems, and liquidity problems were short lived. The majority decried the situation of excessive use of Fund resources with 24 countries in debt to the Fund in 30 of the past 50 years and 46 more in debt for more than 20 years. The notion of insolvency of a country is hardly straightforward. Fischer (1999) argued that if a crisis were well managed, a country might well be able to repay all its external debt, but not if the crisis were poorly managed. While the G-7 Ministers (2000) and Summers (2000) agreed that excessive and prolonged use of Fund resources need to be discouraged, the 120 day limit seemed too restrictive. There is also a growing consensus that structural adjustment, now funded by the EFF, should be the province of the World Bank rather than the IMF. But fashion in these matters changes. The IMF facilities with longer term were created when the Fund was under attack from the opposite direction. "Then, the criticism was that Fund lending programs were too short-sighted, too focused on correcting balance-of-payments disequilibria, and not focused enough at promoting sustainable economic growth. Demand-management alone could not do the job; supply measures were needed and these would take time….the pendulum is swinging back the other way." (Goldstein, 2000, 5-6) In September 2000 the IMF's Executive Board decided to shorten somewhat the maturities of its loans. For stand-by arrangements the maturities have been reduced by one year to 2.25 to 4 years, and the EFF loans now have a maximum maturity of 7 rather than 10 years.

IV-E. Size of Loans

Another issue is the appropriate size of loans. Normal access to IMF financing is one times quota on an annual basis and three times quota on a cumulative basis. On the basis of this metric recent IMF commitments have been large-5 to 7 times quota in the case of Mexico, Thailand, Indonesia, and Brazil, and 19 times quota in the case of Korea. However, actual disbursements were smaller than commitments. On the other hand, as a liquidity facility Fund quotas have not kept pace with the growth of either country GDP or trade.

Using 1945 as the base, if quotas had kept pace with the growth in GDP they would be three times their present size and, if they kept pace with the growth in trade, six times. (Goldstein, 2000, 6)

Most commentators have argued that IMF rescue packages should be smaller to limit moral hazard.[18] The CFR report suggested returning to earlier IMF rules, which limited loans to 3 times quota, except when there was clear evidence that the crisis might be of systemic importance. Larger loans would then be permitted, but only upon the agreement of a super-majority of creditor countries. A small loan would be enough to cushion a recession and sooth the foreign exchange market, but not large enough to defend an overvalued exchange rate or bail out uninsured private creditors. The U.S. Treasury also rejected large loan packages, but proposed price instead of quantity rationing, namely that higher interest rates on both larger and longer IMF loans be used to discourage borrowing, a suggestion supported by the G-7 Finance Ministers' Report (2000). With regard to loan size, there is as yet no sign that the Fund will restrict lending to fewer multiples of quota, though the access to the EFF has been made more selective.

[18] *Actually although moral hazard was the most important issue for IFIAC, the Commission did not suggest an approach that would reduce the size of IMF loans. In fact, they suggested that loans could be equal to one year's tax receipts which would have permitted much larger loans. For example, as noted by the U.S. Treasury (2000) if this approach were applied to Brazil in 1998, it would have permitted a loan of $139 billion some 30 times Brazil's quota in the IMF.*

V. Actions by the Developed Countries

The prior two sections have covered the actions to be taken by the developing countries and the International Financial Institutions to reduce the incidence and severity of financial crises. This section deals with the actions to be taken by creditor nations, both to reduce the volatility of financial flows to emerging markets and to provide additional capital for internationally active banks. There is currently significant debate on the proposals described below, which are both new and complex.

V-A. Private Capital Flows

Today 85 percent of the capital flowing to developing countries comes from the private sector and from half to two thirds of that is in the form of foreign direct investment. In the years prior to 1980 foreign direct investment was less than $10 billion per year. By 1990 it had increased to $25 billion per year, and by 2000 it was of the order of $180 billion per year (see Table 1). Foreign direct investment is highly desirable, for it brings with it enhanced technology and management skills and is the least volatile source of foreign finance. However, it is quite concentrated, in that 70 percent of FDI flows to ten countries and 93 percent to the middle income countries. On a regional basis somewhat over 40 percent of the private monies flow to Latin America, 30 percent to East Asia, 15 percent to Eastern and Central Europe, and the remainder to South Asia, the Middle East, and Africa.

It is clear that there has been a sea-change in attitude toward foreign direct investment in both the developing and developed countries. Many developing countries had been suspicious of multinationals; now, in most countries, the welcome mat is out. While most developing countries still maintain some restrictions on direct investment in so-called "strategic industries," 94 percent of the more than 1,000 policy changes toward foreign direct investment noted by UNCTAD in the 1990s opened markets (Williamson, forthcoming, 60). Foreign corporations on their part recognized the opportunity to profit from such investments. In some cases they moved to take advantage of cheaper skilled labor, in others because of the growing opportunity to serve domestic markets.

The flow of FDI has grown rapidly and with little volatility. (See Table 1.) Official lending (including grants) has also been quite stable from year to year. However, the official flows have not grown and in 2000 were roughly at the same level as in 1980. Bank lending, bonds, and portfolio investments in equities are far less stable. For example, in sum these fell from just under $150 billion in 1996 to $35 billion in 1999. Herein lies the instability that it is desirable to curb. Volatility is even more pronounced on a regional and country basis. In fact the reversal in bank lending was the major source of instability at the time of the East Asian crisis.

There are really only four ways for a developing country to respond to an impending debt crisis. A country can through macro-economic policy squeeze the domestic economy hoping to generate needed foreign exchange by cutting imports and freeing resources for export. Secondly, it can turn to the IFIs asking them to provide longer term, lower interest rate loans and use the funding to repay private creditors. Third it can ask the creditors to provide voluntary relief both through new loans and rewriting old loans on more generous terms. (This is referred to as "bailing in" rather than "bailing out".) And if all else fails, it can default. Countries usually do attempt the first three before the last. Those familiar with Argentina's actions in recent years know that it used a combination of the first three approaches before resorting to default. Returning now to the IMF, there is clearly a relationship between the size of IMF lending and the likelihood that part of the loss will have to be absorbed by the private sector. Large IMF loans mean that private creditors will find it easier to collect what they are owed. Hence those who fear moral hazard on the part of the private sector would limit the size of IMF loans.

V-B. Reducing the Volatility of Private Finance

What measures might the developed countries take to reduce the volatility of capital flows to developing countries? Should the measures be mandatory, that is, made part of the regulatory regime, or should they be voluntary? If mandatory, would they have serious consequences for the flow or pricing of loans to the developing countries? If there is a crisis, can the private sector be 'bailed in," that is, forced to absorb some of the loss? This is now referred to as private sector involvement (PSI).

Williamson's forthcoming book examines what measures might reduce volatility differentiating among types of capital flows. To reduce the volatility of foreign bank lending, he argues that it is necessary to extend average maturities reducing the ability of banks to withdraw funds rapidly in the face of impending crisis. Furthermore, he would mandate that more of foreign bank lending be in local currency to lessen the trauma of devaluation. Under the original 1988 Basel system of capital weights for banks, loans of less than one year to non-OECD countries received a capital weight of only 20 percent, while loans of more than one year were weighted at 100 percent.

Discussed below is the new proposal for capital weighting, which is far more sophisticated and would go a long way to reduce the short term bias of the old rules. Williamson argues that these need to be reinforced by other measures. Banks should be required to issue subordinated debt as part of their capital requirements. Those buying these bonds would be exposed to loss and, institutional investors would only acquire such debt if they felt the bank had a good system of risk management. Market participants would then supplement bank supervisors in enforcing prudent bank behavior. Lastly, he suggests that in the case of a crisis, a debtor negotiating in good faith should be allowed to declare a standstill on amortization payments of outstanding loans (this proposal has been made also by Anne Kruger, Deputy Managing Director of the IMF).

Williamson recognizes that if enforced as mandatory regulations, rather than being voluntarily included in some debt contracts, these rules might well discourage bank lending to developing countries. He notes that banks are already reducing their lending to emerging countries, a development he considers desirable, arguing that it may be easier to change the mix of creditors to developing countries than to try to change the behavior of a class of creditors.

In the 19th century most foreign financing was in the form of bonds but this form of financing languished in the Twentieth Century. Prior to 1991 it seldom exceeded a few billion dollars per year but by the mid-1990s had grown to $35 billion per year about equally divided between public and private bonds. With the influx of monies from pension and mutual funds, bond financing substantially replaced consortium loans from banks. Bond financing appeared to offer one clear advantage to creditors, when compared to bank financing. Because of the more dispersed nature of the creditors getting the agreement of bond holders to refinance was more difficult. Hence developing country borrowers were less likely to ask bond holders for relief. That very fact has become the most debated issue with regard to bonds, with some arguing for the mandatory introduction of, what is called a “collective action clause” into bond contracts. This would make any agreement reached with the majority of bond holders enforceable, preventing a minority of bond holders from holding out for better terms.

The IMF has now proposed (Krueger 2001) mandatory restructuring of sovereign debt for countries experiencing a crisis.

Those opposed to the mandatory nature of this proposal argue that it would substantially increase the interest rates that developing countries would have to pay on their bonds. About one-third of bonds are now issued under United Kingdom law and two thirds under New York law. Bond agreements under UK law already contain a collective action clause. Research has shown that the difference in interest rates paid by the same borrower under the two systems is small and that good credit risks actually pay less with collective action clauses because creditors recognize that such a clause might actually enhance recovery in the unlikely event of a default. Little progress has been made in this debate and those who oppose a mandatory change in bond contracts seem likely to win the day.

The IMF has now proposed (Krueger 2001) mandatory restructuring of sovereign debt for countries experiencing a crisis. It would allow a country, with the consent of the IMF, to impose a temporary standstill on debt repayment while the country negotiated with its creditors. Agreements reached with the large majority of creditors would then be binding on all creditors, preventing small creditors from demanding favorable treatment as recently happened in the case of Peru. This would be akin to domestic bankruptcy procedures. The proposal is at an early stage and the details have not yet been worked out. This could not be imposed unilaterally by the IMF and would require both Board approval and changes in the laws of many countries.

V-C. Capital Requirements for Banks: The New Proposal

Since 1988 a key element of the International Financial Framework has been the Basel Capital Accord which established capital requirements for internationally active banks in the G-10[19] countries. This is the well known requirement that banks must maintain capital of 8 percent of risk weighted assets. While originally designed for a relatively small number of internationally active banks, the Basel framework became the accepted world standard, being adopted by more than 100 countries and applied to banks with only domestic business as well. Over the last 13 years there have been a number of amendments to the original accord, the most important of which was made in 1996 to specify capital requirements for trading risk held by banks in bonds, equities, foreign exchange and commodities.

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Because of substantial changes in the banking industry in terms of new products, new technology and better systems for measuring risk, the Basel Committee on Bank Supervision (BCBS) felt that the capital accord needed fundamental restructuring. It published its initial proposal for the new system in June 1999. After receiving extensive comments, it published a revised version in January 2001. This proposal was also open to critique and the Committee does not intend to finalize its proposal before the end of 2001 for implementation in 2004. Though the Committee's proposal again applies only to G-10 banks doing international business, the approach is likely to become the new world standard.

The proposal does not change the minimum capital requirement, which remains at 8 percent of risk-weighted assets. Nor is it expected that on average the required amount of capital will increase. Rather the change in risk weighting will cause banks with more risky portfolios to hold more capital. In addition to credit risk, banks will need to consider market risk (the possibility of price changes in assets held), and operational risk (computer failure, poor documentation, or fraud); the 8 percent requirement covers the total risk. Capital requirements for market risk were introduced in 1996 and are not changed in the proposal. Operational risk is made more explicit in the new proposal and roughly 20 percent of overall capital is to cover this risk.

The proposed new system is more complex than the old, particularly in its

[19] *Canada, France, Germany, Italy, Japan, Netherlands, Switzerland, Sweden, United Kingdom, United States. Belgium and Spain are also sometimes included in analyses of this group of countries. The G-10, G-7, G-20 and other country groups are defined in the second paper of this series.*

measurement of risk. It also requires banks to disclose more information about their activities. The assumption here is that the banks raise money in the markets (as distinct from deposits) and that "effective disclosure is essential to ensure that market participants can better understand banks' risk profiles and the adequacy of their capital positions." (BCBS, 2001, 5) Market discipline is to be used to supplement the supervisory process.

The ways to measure risk are expanded. The old approach utilized standardized risk buckets. The new proposal contains a standardized approach for the three types of risk, though the gradation of credit risk classes is increased and updated. Moreover, instead of a pro forma approach (such as all corporate debt having a 100 percent risk weight), weights would be based on risk assessments provided by external institutions, such as rating agencies. Alternatively, instead of the standard approach, a bank can utilize its own internal risk weighting system, if its supervisor feels that the bank's risk management system is adequate. This would change somewhat the role of the supervisor. "Supervisors would be responsible for evaluating how well banks are assessing their capital adequacy needs relative to their risks." (BCBS, 2001, 5).

Even though the proposal is not intended to increase required capital, as was the case with the 1988 Accord, it represents a major change in the ways that banks must be managed, supervised and provide information to the markets. The proposal has elicited a huge number of comments, which can be found on the Bank for International Settlements (BIS) web-site. No one questions the objective: less risk, better measured. The issues lie with implementation. Let us consider the most important issues as they relate to developing countries. First, consider the countries as borrowers; under the existing system corporations and banks cannot have a more favorable risk weight than their sovereign. This will no longer be true. More importantly, the risk classes will be set by rating agencies, but these agencies standards are not clear and not always accurate. In fact the IMF/World Bank Financial Sector Assessment Program would hardly be needed if country risk evaluations were presently done accurately by rating agencies!

As noted the proposal is aimed at internationally active banks. Hence, it applies directly only to the branches and subsidiaries of foreign banks in developing countries. This will change the way the host government must supervise those banks. Needless to say, the new system will require more sophisticated supervision, including supervision of related intermediaries on a consolidated basis. The IMF in its comment on the proposal notes that the new system will require more and upgraded supervisory services and external technical assistance for training country supervisors will be needed.

In the view of the IMF, even this approach is too complicated to be adopted in many of the developing countries.[20] Few banks outside G-10 countries could utilize the internal risk management system for determining capital requirements.

The problem in developing countries lies not so much with risk weights but with the over-statement of bank capital due to under-provisioning for loan losses. Improving information about asset quality and forcing banks to make adequate provisions for bad assets is the heart of the capital problem. More sophisticated risk weighting is a secondary issue in most developing countries. Nevertheless, asking banks in developing countries to take more responsibility for risk management is a good idea. However, the new proposals may do little to reduce instability in developing countries.

[20] *The standard approach would base credit risk weights on the ratings of external agencies. Only a few developing countries have good credit rating agencies.*

VI. Summary

The Conference at Bretton Woods in 1944 established the post-war International Financial Architecture. Under the system the prices of the major currencies were to be pegged, but adjustable if significant misalignments developed. The United States defined its currency in terms of gold and other countries defined theirs in terms of dollars. Trade was to be open, but there were to be controls on capital movements. The IMF was to monitor the rules of the system and make loans to countries needing short term liquidity to defend their exchange rates.

In the last 50 years there have been many minor and three major adjustments to the system. In the late 1960s-early 1970s, the United States trade deficit grew too large to be financed. Too many dollar liabilities were generated. In the late 1960s the SDR was created as an additional reserve currency, and in the early 1970s the major currencies moved to floating rates with a concomitant fall in the value of the dollar. The second change came in the early 1980s with the Latin American debt crisis. Private creditors were forced to write down the value of their loans and the IMF and World Bank took on a new role, that of financing policy changes in developing countries to enable them to adjust following a major crisis. The third adjustment came in the late 1990s, this time in response to crises in some of the most important emerging markets. Instead of ex post adjustment the present changes in the International Financial Architecture are designed to reduce the incidence of crisis and to lessen its severity.

The recent efforts made have produced substantial improvements. With regard to domestic financial systems, reforms are underway. In the last decade the countries of Central Europe have been building financial systems which are increasingly operating on market principles. The systems are not perfect, but the remaining problems appear to be manageable. Several countries in Latin America and East Asia have made major reforms in the wake of crises. India and Turkey have recently taken steps to improve their systems. Many developing countries' financial markets are now more open to foreign participation. Exchange rate systems are moving from soft pegs toward systems that are more robust. Slowly but surely the quality of information in developing countries is also improving. Few developing countries have adopted the IAS in full but some are incorporating important aspects, in particular the accounts of financial intermediaries are becoming more transparent with better treatment of non-performing loans and unpaid interest. These are substantial achievements; still all would agree that much remains to be done. And it is in these areas that AID through its technical assistance programs has much to contribute.

In recent years there have been reforms of the International Financial Institutions. There has been considerable improvement in surveillance, that is, gathering information and assessing country systems to see whether they meet codes and standards of best practice and remain free from the dangers of crisis. But there is still controversy over the role and practices of the IMF as the lender of last resort. Does the IMF's approach reduce or increase the incidence and severity of crisis? Should only those countries which prequalify have access to crisis funding; are the IMF's ex post loan conditions the medicine for recovery, or invasive and unhelpful? Should crisis lending be bigger to stem contagion or smaller to prevent moral hazard; how high should the interest rate be on such loans and how long the term? We have pointed out that the IMF has made adjustments in both its approach and lending terms. But the changes made in this area seem marginal rather than radical.

In addition to the practices of the developing countries and the International Financial Institutions, the third objective has been to change the behavior of the providers of capital. Stabilizing capital flows is seen as the most important action for reducing crises and improving the International Financial Architecture. Here too there has been substantial improvement, more in the mix of funding than in changing the behavior of capital providers. In value terms foreign direct investment has become predominant and flows are quite stable. But bond and bank finance are still quite volatile. Can these aspects of finance be made more stable and can the private lenders be forced to bear a larger part of the cost of crises? "Changes in the international financial system have been driven largely by the ever more rapid growth of private international capital flows, which first overwhelmed the Bretton Woods fixed exchange rate system, and since the 1980s have had especially strong effects on the emerging market countries….The evolving system poses several challenges…. (including) the need to find ways of working constructively with the private sector in both crisis prevention and crisis response." (Fischer, 2000, 2). Because of the fear that actions taken to reduce volatility might also decrease the overall flow of capital, there has been reluctance to introduce mandatory regulations, such as collective action clauses in bond contracts. In most crises provisioners of all forms of capital have lost money. Still to a degree there has been some bailing out. The management of ex-post restructuring is still determined on a case by case basis, though the IMF has now proposed a new approach to sovereign debt restructuring, akin to domestic bankruptcy proceedings. However, private sector involvement is the area in which least has been accomplished to date.

Crisis seems to be an inherent flaw of capitalism. The disease has not one cause, but many. We should continue our efforts to find and ameliorate those causes but without the conceit that crisis will ever be eliminated.

VII. REFERENCES

Bagehot, Walter. 1873. *Lombard Street: a Description of the Money Market.* London, Williams, Clowes & Sons

Bretton Woods Commission. 1994. *Bretton Woods: Looking to the Future,* Washington DC, Bretton Woods Commission.

Caprio, Gerard, Honohan, Patrick. 2001. *Finance for Growth: Policy Choices in a Volatile World.* World Bank/Oxford University Press.

Council on Foreign Relations Independent Task Force. 1999. *Safeguarding Prosperity in a Global Financial System: the Future International Financial Architecture.* Washington DC, Institute for International Economics.

De Long, J. Bradford. 1998. "Preparing for International Capital Flows" *Economic Perspectives*, August 1998.

Demigurc-Kunt, Asli. 2000. *Market Discipline and Financial Safety Net Designs*, Policy Research working Paper 2183. Washington DC, World Bank.

Dorn, James. 1999. "Money in the New Millennium: The Global Financial Architecture" in *Cato Journal,* Vol. 18 No. 3 (Winter 1999).

Eichengreen, Barry. 1999. *Toward a New International Financial Architecture: a Practical Post Asia Agenda.* Washington DC, Institute for International Economics.

Fischer, Stanley. 1999. *On the Need for an International Lender of Last Resort.* Washington DC.: International Monetary Fund.

Fischer, Stanley. 2001. "Exchange Rate Regimes: Is the Bipolar View Correct?" *Finance and Development*, June 2001:38:2.

Fischer, Stanley. 2000. "Managing the International Monetary System" Address to the International Law Association, July 26 2000. Washington DC, International Monetary Fund.

Frankel, Jeffrey. 1999. "The International Financial Institutions" Policy Brief 51. Washington DC, Brookings Institute.

Goldberg, Linda et al. 2000. "Foreign and Domestic Bank Participation in Emerging Markets", Unpublished, Federal Reserve Bank of New York, March 2000.

Goldstein, Morris. 2000. "Strengthening the International Financial Architecture: Where do We Stand?" Washington DC, Institute for international Economics.

Kohler, Horst. 2000. *Report of the Managing Director on Progress in Strengthening The Architecture of the International Financial Systems and Reform of the IMF.* Washington DC, International Monetary Fund.

Krueger, Anne. 2001. "International Financial Architecture for 2002: A New Approach to Sovereign Debt Restructuring," Address to the National Economists' Club Annula Members' Dinner, November 26, 2001.

Mathieson, Donald, and Roldos, Jorge. 2001. "Foreign Banks in Emerging Markets. In Latan, Robert et al, *Open Doors*, Washington DC, Brookings Institute.

Niskanen, William. 1999. "Reshaping the Global Financial Architecture: Is there a Role for the IMF?" *Cato Journal* 18:3 (Winter 1999): 231-354.

Solomon, Robert. 1982. *The International Monetary System 1945-81*. Harper and Rowe, New York.

Summers, Lawrence. 1990. "Building an International Financial Architecture for the 21st Century", *Cato Journal*, Vol 18, No.3 (Winter 1999).

Summers, Lawrence. 2000. "Testimony before the International Monetary and Finance Committee". Washington DC, April 2000.

U.S. Treasury, 2000. "Response to the Report of the International Financial Institution Advisory Commission". Washington DC: June 2000.

Williamson, John, (forthcoming), *Curbing the Boom-Bust Cycle: the Role of Wall Street.*

The Working Group on Transparency and Accountability of Financial Stability Forum, "*Report of the Working Group on Transparency and Accountability*", October 1998

The Working Group on Strengthening Financial Systems of Financial Stability Forum, "*Report of the Working Group on Strengthening Financial Systems*", October 1998

The Working Group on International Financial Crises of Financial Stability Forum, "*Report of the Working Group on International Financial Crises*", October 1998

The World Bank, *"Global Development Finance"*, Various editions (1986 ~2000)